

## PATENT ABSTRACTS OF JAPAN

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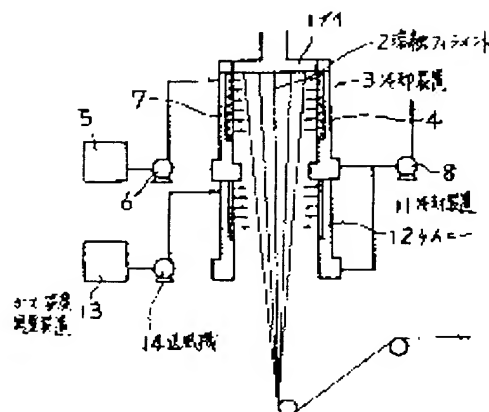
## (54) COOLING METHOD FOR MELT-EXTRUDED FILAMENTS IN THE SPINNING UNIT

## (57)Abstract:

PURPOSE: To improve the yarn properties such as elastic modulus or tensile strength and reduce yarn breakage during melt extrusion by controlling the temperature and/or volume of cooling air from the air cooler so that the cooling is effected weakly in the upper stream and powerfully in the lower stream of the cooling chimney.

CONSTITUTION: The temperature and/or volume of cooling air are controlling so that the extruded yarn is weakly cooled in the upper stream, while strongly in the down stream.

Uniform draft is applied and the yarn properties such as the elastic modulus and tensile strength are increased and melted yarn breakage is reduced. Strong cooling in the down stream prevents the filaments from fusing and the cooling zone can be shortened in comparison with gradual cooling.



## LEGAL STATUS

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